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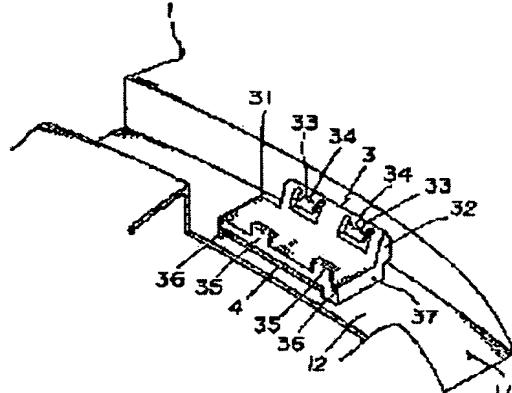
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(54) LOCKING CLIP FOR ROOF DRIP MOLDING

(57) Abstract:

PURPOSE: To prevent the defective appearance of a roof due to the outflow of the adhesive by providing a height setting body relative to a bottom surface of a recessed groove on the lower surface of a clip body, and providing a preventing wall to prevent the adhesive from flowing out of the clip body on the clip body to uniformly fit a molding.

CONSTITUTION: Height setting bodies 36 to set the fitting height of a locking clip 3 relative to the bottom surface 12 of a recessed groove 11 of a roof 1 are respectively provided on a corner part on the lower surface side 4 of a clip body 31. A preventing wall 37 is integratedly provided across the respective height setting bodies 36 on the lower part side in the inclination side of the roof 1. The preventing wall 37 prevents the outflow of the adhesive 4 from the opposite part to a clip body 21 when the clip 3 is fixed to the bottom surface 12 of the recessed groove 11. As a result, the outflow of the adhesive 4 is prevented even when the angle of inclination of the roof 1 is large. The fitting height and the position of the clip body 31 can be set constant through the respective setting bodies 36 even when a part of the double coated adhesive tape is left at irregular height on the bottom surface 12 of the recessed groove 11 when the molding is re-fitted.



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CLAIMS

[Claim(s)]

[Claim 1] In the stop clip which fixes with adhesives (4) on the base of the concave (11) formed in the roof (1), and stops a roof drip mall (2) While establishing the setting object (36) which sets the height to said concave (11) base of the inferior surface of tongue of this clip body (31) as the body of a clip (31) The stop clip of the roof drip mall characterized by having established the inhibition wall (37) which prevents that said adhesives (4) flow into a way outside said body of a clip (31) on said body of a clip (31).

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DETAILED DESCRIPTION**[Detailed Description of the Invention]****[0001]**

[Industrial Application] This invention relates to the stop clip of a roof drip mall, and the stop clip whose base of the concave formed in the roof is made to stop a roof drip mall through adhesives in detail.

[0002]

[Description of the Prior Art] Conventionally, as roof structure of an automobile, the concave prolonged in a car-body cross direction is formed in the cross direction both sides of a roof, and there are some which attached the roof drip mall in this concave as shown in JP,63-112153,U. And in attaching said roof drip mall in said concave Two or more stop clips with two or more stop pawls which can engage with the engagement section prepared in said mall at the top-face side are used. It fixes through the double faced adhesive tape of the shape of sponge which consists of the thermosetting resin which infixes these stop clip among these both inside said concave in the die-length direction predetermined location. He is trying to attach this mall in said concave by making the engagement section formed in die-length direction two or more parts of said mall engage with each stop pawl formed in said each stop clip.

[0003] by the way, when removing said roof drip mall from said concave to the method side of outside at the time of repair check of said roof drip mall etc. Since he is trying to pull out this mall compulsorily [out of said concave] with tension to an upper part side, Tensile stress concentrates on each stop pawl of said stop clip which engaged with the engagement section of said mall. These stop pawl is damaged. ***** from a stop clip When it is easy and a stop pawl once attaches a mall again in said concave with removal **** from this stop clip, Since engagement maintenance of this mall becomes impossible, the reuse of said stop clip is not made, therefore, usually the stop clip for exchange is prepared in a repair shop etc.

[0004] As drawing 5 shows said stop clip A for exchange, by the top-face side of the body A1 of a clip which carried out the deer and was made into the shape of an outline rectangle to a cross direction 1 side Form in one the projected part A2 which is prolonged in a cross direction and projects towards the upper part, and opening hole A3 and A3 are formed in the two die-length directions of this projected part A2. While preparing 1st stop pawl A4 and A4 in the interior of each [these] opening hole A3 respectively possible [elastic deformation], to the top-face other side of said body A1 of a clip While forming two 2nd stop pawl A5 which projects towards the upper part said each 1st stop pawl A4 and letter of opposite and in which elastic deformation is possible, and A5, by the inferior-surface-of-tongue side of said body A1 of a clip in front and rear, right and left 4 corner It is contacted by base B-2 of the concave B1 prepared in the automobile roof B, and it projected, respectively and four height setting objects A6 which set up the mounting height of said stop clip A to this base B-2 are formed. The need of establishing each [these] setting object A6 is based on the following reasons. that is, when attaching said mall again in this concave B1 after demounting said roof drip mall from said concave B1 The usual adhesives C which the first stop clip had fixed through the double faced adhesive tape on base B-2 of said concave B1 and which has a fluidity in the same part mostly are applied. Although re-anchoring of this mall is performed by fixing said clip A in a concave B1 by hardening of these adhesives C, and making the engagement section of said mall engage with said each stop pawl A4 and A5 which were prepared in this clip A

When pulling out said mall from said concave B1 to the method of outside first at the time of repair check etc., The double faced adhesive tape of the shape of said sponge which fixes said clip A to base B-2 of said concave B1 exfoliates from the thickness direction pars intermedia grade with the tensile force of said mall. Said some of tapes serve as uneven height, and it remains in said concave base B-2 side. Therefore, if said adhesives C are applied on said concave base B-2 in which the tape part remained and the inferior-surface-of-tongue side of said clip A is fixed at the time of reinstallation of the mall into said concave B1 The mounting height and attachment posture of said mall by which the mounting height and attachment posture over said concave base B-2 of this clip A become uneven, and fixed maintenance is carried out into the above and b1 with each above stop clip A also serve as an ununiformity.

[0005] As mentioned above, when forming said each setting object A6 in the inferior-surface-of-tongue side of said stop clip A, however, by making this each setting object A6 contact on base B-2 of said concave B1 The mounting height to concave base B-2 of said clip A is made to regularity through said each setting object A6. Therefore, pile said adhesives C in the attachment part of said clip A on base B-2 of said concave B1 in which the remains of peeling of said double faced adhesive tape remain, and it applies in the shape of raising. By making said adhesives C carry out the junction unification of the inferior-surface-of-tongue side of this clip A, holding said clip A in predetermined height with said each setting object A6 Said stop clip A can be fixed with a predetermined posture in the predetermined height location of said concave B1, and the mounting height and the attachment posture can be attached, making said mall into homogeneity into said concave B1 through each of this stop clip A.

[0006]

[Problem(s) to be Solved by the Invention] however, with the above stop clip A for exchange Since four height setting objects A6 which are contacted by base B-2 of the concave B1 prepared in front and rear, right and left 4 corner to the automobile roof B by the inferior-surface-of-tongue side of said body A1 of a clip, and set up the mounting height of said clip A to this base B-2 protrude, respectively, A clearance is formed between each [these] setting object A6, and moreover said roof B in which said clip A is attached From inclining so that a car-body order part may generally become [a center section] high low In the time of attaching said clip A in said concave B1 located in the car-body order part to which whenever [tilt-angle / of this roof B] serves as size especially, and carrying out fixed maintenance of the die-length direction both-ends side of said roof drip mall with this clip A Pile the usual adhesives C with a fluidity in the attachment part of said clip A on base B-2 of said concave B1, and it applies in the shape of raising. When fixing said clip A by hardening of these adhesives C, it flows into the method side of outside through a clearance before and after forming said some of adhesives C with said each setting object A6 from the opposite inferior-surface-of-tongue side of said clip A. The amount of adhesives which remains in the opposite inferior-surface-of-tongue side of said clip A becomes below the amount of conventions, the attachment reinforcement to said concave B1 of this clip A becomes weak, and there is fault which moreover spoils the appearance of said roof B when said adhesives C flow out of the clearance between said each setting object A6 into the method side of outside.

[0007] After the purpose of this invention takes out a roof drip mall from the concave of an automobile roof to the method of outside at the time of repair check etc., When using the stop clip for exchange and attaching said mall again in this concave, even if a part of double faced adhesive tape became uneven height and it remains in the base side of said concave Being able to attach the mounting height and attachment posture of said mall in homogeneity It can prevent that the adhesives which fix said stop clip in said concave flow into the method of the outside of a clip. It is in enabling it to hold the appearance of this roof good, without being able to fix said stop clip certainly in said concave with these adhesives, and moreover spoiling the appearance of said roof by the outflow of said adhesives.

[0008]

[Means for Solving the Problem] In the stop clip which this invention fixes with adhesives 4 on the base of the concave 11 formed in the roof 1, and stops the roof drip mall 2 in order to attain the above-mentioned purpose While establishing the setting object 36 which sets the height to said concave 11 inferior surface of tongue of this body of clip 31 inferior surface of tongue as the body

31 of a clip, the inhibition wall 37 which prevents that said adhesives 4 flow into a way outside said body 31 of a clip on said body 31 of a clip was established.

[0009]

[Function] After taking out said roof drip mall 2 from the concave 11 of the automobile roof 1 to the method of outside at the time of repair check etc. according to the above stop clip, by the case where said mall 2 is again attached in this concave 11 When piling the usual adhesives 4 with a fluidity in the attachment part of said body 31 of a clip on the base of said concave 11, applying in the shape of raising and fixing said body 31 of a clip by hardening of these adhesives 4, Even if a part of double faced adhesive tape became uneven height and it remains on the base of said concave 11 By making said height setting object 36 prepared in the inferior-surface-of-tongue side of said body 31 of a clip contact on the base of said concave 11 The mounting height and the attachment posture as opposed to a concave base for said body 31 of a clip can be fixed as fixed through said setting object 36. With moreover, the inhibition wall 37 prepared in the inclination direction lower side edge section of said roof 1 in said body 31 of a clip, being able to attach the mounting height and attachment posture of said mall 2 in homogeneity through each of this stop clip It can prevent flowing out of said body 31 of a clip into the method inclination lower part side of outside in the condition of said adhesives 4 of not hardening. Therefore, the adhesives 4 of the specified quantity are securable between this body 31 of a clip, and the base of said concave 11. By being able to fix said body 31 of a clip certainly in said concave 11 with these adhesives 4, and moreover preventing the outflow of said adhesives 4 with said inhibition wall 37 Without spoiling the appearance of said roof 1 by this adhesives outflow, the appearance of this roof 1 can be held good and the overall reinforcement of said body 31 of a clip can also be strengthened by moreover establishing said inhibition wall 37.

[0010]

[Example] Drawing 4 shows the automobile roof partially, formed in the cross direction both sides of this roof 1 the concave 11 of a Uichi Hidari pair prolonged in a car-body cross direction, and has attached the roof drip mall 2 on the base 12 of each [these] concave 11, respectively. In addition, said roof 1 consists of two or more division members 1A and 1B divided into the cross direction, bends a part for the cross direction both ends of each [these] division members 1A and 1B in the shape of a stage, and forms said concave 11 by carrying out the junction unification of this bending part with a welding means so that clearly [in drawing 3]. And when once taking out said mall 2 from said concave 11 to the method side of outside at the time of repair check of an automobile etc., attaching this mall 2 again in said concave 11 and the stop clip which was carrying out fixed maintenance of said mall 3 into said concave 11 first is damaged, another stop clip 3 for exchange is used.

[0011] As drawing 1 - drawing 3 showed said stop clip 3, by the top-face side of the body 31 of a clip made into the shape of an outline rectangle to a cross direction 1 side The projected part 32 which is prolonged in a cross direction and projects towards the upper part is formed in one, and the opening holes 33 and 33 are formed in the two die-length directions of this projected part 32. Inside each [these] opening hole 33 While forming the 1st stop pawls 34 and 34 which it was combined with the upper limit edge of each of this opening hole 33, and the lower limit side turned caudad among said bodies 31 of a clip, and were projected in the shape of an inclination and in which elastic deformation is possible, respectively The two 2nd stop pawls 35 and 35 equipped with the stop section which projects towards a way side among said bodies 31 of a clip in upper limit in which elastic deformation is possible are formed in an opposite part with said each 1st stop pawl 34 by the top-face other side of said body 31 of a clip.

[0012] By the inferior-surface-of-tongue side of said body 31 of a clip, and in front and rear, right and left 4 corner While projecting, respectively and forming four height setting objects 36 which are contacted on the base 12 of said concave 11, and set up the mounting height of said stop clip 3 to this base 12 Even if there are few said bodies 31 of a clip, by die-length direction 1 flank in the inclination direction lower side edge section of said roof 1 When making said clip 3 fix on the base 12 of said concave 11, the inhibition wall 37 which prevents the outflow from an opposite part with said body 21 of a clip of the adhesives 4 applied on this base 12 Ranging over between each setting object 36 located in the inclination direction lower part side of said roof 1, and 36, it prepares in one. In addition, in the example of each drawing, the stop clip 3 formed in the front-side edge at which

whenever [tilt-angle / of said roof 1] serves as size is shown, and since the anterior part side of said roof 1 becomes an inclination lower part side in the case of this stop clip 3 and it becomes lower order, said inhibition wall 37 is formed in the inferior-surface-of-tongue anterior part side of said body 31 of a clip.

[0013] Moreover, the mall body 21 by which as for said roof drip mall 2 fixed maintenance is carried out at said stop clip 3 so that clearly [in drawing 2], When said mall body 21 is held in a concave 11 through said clip 3 with the 1st and 2nd engagement sections 22 and 23 which engage with said 1st and 2nd stop pawls 34 and 35 formed in the both-sides wall of this mall body 21, Two tongue-shaped pieces 24 and 25 contacted by the both-sides edge section of this concave 11 are had and constituted.

[0014] Next, an operation of the above stop clip 3 is explained. First, when attaching said mall 2 again in this concave 11 after taking out said roof drip mall 2 from the concave 11 of the automobile roof 1 to the method of outside at the time of repair check etc., When the stop clip which was carrying out fixed maintenance into said concave 11 first is damaged Although the adhesives 4 usual [with a fluidity] whose first stop clip had fixed through the double faced adhesive tape on the base 12 of said concave 11 are mostly piled in the same part, it applies in the shape of raising and said stop clip 3 is fixed on said base 12 by hardening of these adhesives 4 Even when attaching said stop clip 3 in the front-side edge which serves as size whenever [tilt-angle / of said roof 1] at this time Even if there are few said bodies 31 of a clip, by die-length direction 1 flank in the inclination direction lower side edge section of said roof 1 Since said inhibition wall 37 is established, it can prevent that said adhesives 4 flow out of said body 31 of a clip into the method lower part side of outside in the condition of not hardening, through this inhibition wall 37. Therefore, the adhesives 4 of the specified quantity are securable between this body 31 of a clip, and the base 12 of said concave 11. By being able to fix said body 31 of a clip certainly in said concave 11 with these adhesives 4, and moreover preventing the outflow of said adhesives 4 with said inhibition wall 37 Without spoiling the appearance of said roof 1 by this adhesives outflow, the appearance of this roof 1 can be held good and the overall reinforcement of said body 31 of a clip can also be strengthened by moreover establishing said inhibition wall 37.

[0015] Furthermore, even if a part of double faced adhesive tape became uneven height and it remains on the base 12 of this concave 11 at the time of reinstallation into said concave 11 of said above malls 2 Since two or more height setting objects 36 are formed in the inferior-surface-of-tongue side of said body 31 of a clip, By making this each setting object 36 contact on the base of said concave 11, the mounting height and attachment posture over the concave base 12 of said body 31 of a clip are made to regularity through said each setting object 36. Therefore, pile said adhesives 4 in the attachment part of said clip 3 on the base 12 of said concave 11 in which the remains of peeling of said double faced adhesive tape remain, and it applies in the shape of raising. It is that which can fix said clip 3 by making said adhesives 4 carry out the junction unification of the inferior-surface-of-tongue side of this clip 3, holding said clip 3 in predetermined height with said each setting object 36, making a predetermined posture hold in a way predetermined height location among said concaves 11.

[0016] And as mentioned above, after fixing said stop clip 3 in the concave 11 of said roof 1, re-anchoring of said mall 2 is performed to said concave 11 by making each engagement sections 22 and 23 stopped to said mall 2 engage with said each stop pawls 34 and 35 formed in this clip 3, respectively. Since the predetermined posture is fixed through said each setting object 36 at this time where said clip 3 is held in the predetermined height location in said concave 11, through each of this stop clip 3, the mounting height and attachment posture over said concave 11 of said mall 2 can be made into homogeneity, and can be attached.

[0017] Although said inhibition wall 37 was formed only in die-length direction 1 flank in the above example by the inferior-surface-of-tongue side of said body 31 of a clip When it is also possible to prepare in the inferior-surface-of-tongue die-length direction both sides of said body 31 of a clip and it is ****(ed), this inhibition wall 37 The rigidity of about [that the outflow by the side of a way can be prevented much more good outside said adhesives 4 with said each inhibition wall 37] and said body 31 of a clip can be raised further.

[0018]

[Effect of the Invention] As explained above, while establishing the setting object 36 which sets the height to roof concave of this body of clip 31 inferior surface of tongue 11 inferior surface of tongue as the body 31 of a clip according to the stop clip of this invention Since the inhibition wall 37 which prevents the outflow from said body 31 of a clip of the adhesives 4 which adhere to said body 31 of a clip at said concave 11 was established After taking out the roof drip mall 2 from the concave 11 of the automobile roof 1 to the method of outside at the time of repair check etc., by the case where said mall 2 is again attached in this concave 11 When piling the usual adhesives 4 with a fluidity in the attachment part of said body 31 of a clip on the base of said concave 11, applying in the shape of raising and fixing said body 31 of a clip by hardening of these adhesives 4, Even if a part of double faced adhesive tape became uneven height and it remains on the base of said concave 11 By making said height setting object 36 prepared in the inferior-surface-of-tongue side of said body 31 of a clip contact on the base of said concave 11 The mounting height and the attachment posture as opposed to a concave base for said body 31 of a clip can be fixed as fixed through said setting object 36. With moreover, the inhibition wall 37 prepared in the inclination direction lower side edge section of said roof 1 in said body 31 of a clip, being able to attach the mounting height and attachment posture of said mall 2 in homogeneity through each of this stop clip It can prevent flowing out of said body 31 of a clip into the method inclination lower part side of outside in the condition of said adhesives 4 of not hardening. Therefore, the adhesives 4 of the specified quantity are securable between this body 31 of a clip, and the base of said concave 11. By being able to fix said body 31 of a clip certainly in said concave 11 with these adhesives 4, and moreover preventing the outflow of said adhesives 4 with said inhibition wall 37 Without spoiling the appearance of said roof 1 by this adhesives outflow, the appearance of this roof 1 can be held good and the overall reinforcement of said body 31 of a clip can also be strengthened by moreover establishing said inhibition wall 37.

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DESCRIPTION OF DRAWINGS**[Brief Description of the Drawings]**

[Drawing 1] the part which shows the attachment condition to the concave of the stop clip concerning this invention -- a notching perspective view.

[Drawing 2] The expansion perspective view seen from the inferior-surface-of-tongue side of this stop clip.

[Drawing 3] Drawing of longitudinal section of the stop clip attached in the concave.

[Drawing 4] The partial perspective view of an automobile roof.

[Drawing 5] The perspective view showing the conventional stop clip.

[Description of Notations]

- 1 Roof
- 11 -- Concave
- 2 Roof drip mall
- 3 Stop clip
- 31 -- Body of a clip
- 36 -- Height setting pair
- 37 -- Inhibition wall
- 4 Adhesives

[Translation done.]

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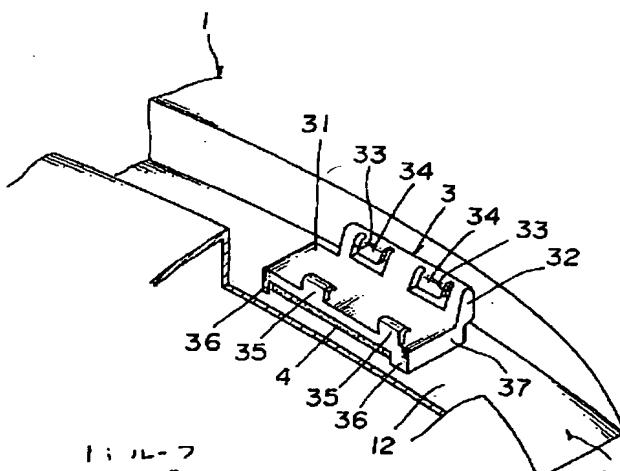
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(54)【発明の名称】ルーフドリップモールの係止クリップ

(57)【要約】

【目的】ルーフドリップモール2を自動車ルーフ1の凹溝11から取出した後、モール2を交換用係止クリップ3を用いて再度取付けるとき、クリップ3の凹溝底面に対する取付高さを一定に固着し、モール2の取付高さや取付姿勢を均一としながら、クリップ3を凹溝11内に固着する接着剤4が外方に流出するのを阻止して、クリップ3を凹溝11内に確実に固着可能とする。

【構成】係止クリップ3のクリップ本体31に、該クリップ本体31下面のルーフ凹溝11下面に対する高さ設定する設定体36を設けると共に、クリップ本体31に、接着剤4のクリップ本体31からの流出を阻止する阻止壁37を設けた。



I : ルーフ
II : 凹溝
3 : 係止クリップ⁸
31 : クリップ本体
36 : 高さ設定体
37 : 防止壁
4 : 接着剤

【特許請求の範囲】

【請求項1】ルーフ(1)に形成した凹溝(11)の底面に接着剤(4)により固着してルーフドリップモール(2)を係止する係止クリップにおいて、クリップ本体(31)に、該クリップ本体(31)下面の前記凹溝(11)底面に対する高さを設定する設定体(36)を設けると共に、前記クリップ本体(31)に、前記接着剤(4)が前記クリップ本体(31)の外方に流出するのを阻止する阻止壁(37)を設けていることを特徴とするルーフドリップモールの係止クリップ。

【発明の詳細な説明】

【0001】

【産業上の利用分野】本発明はルーフドリップモールの係止クリップ、詳しくは、ルーフに形成した凹溝の底面に接着剤を介してルーフドリップモールを係止させる係止クリップに関する。

【0002】

【従来の技術】従来、自動車のルーフ構造として、例えば実開昭63-112153号公報に示されているように、ルーフの車幅方向両側に車体前後方向に延びる凹溝を形成して、この凹溝内にルーフドリップモールを取付けるようにしたものがある。そして、前記ルーフドリップモールを前記凹溝内に取付けるにあたっては、上面側に前記モールに設けた係合部に係合可能な複数の係止爪をもつ複数の係止クリップを用い、これら係止クリップを前記凹溝の内部で長さ方向所定位置に、これら両者間に介装する熱硬化性樹脂から成るスポンジ状の両面接着テープを介して固着し、前記各係止クリップに設けた各係止爪に前記モールの長さ方向複数個所に形成した係合部を係合させることにより、該モールを前記凹溝内に取付けるようにしている。

【0003】ところで、前記ルーフドリップモールの修理点検時などに、前記凹溝から前記ルーフドリップモールを外方側へと取り外すときには、該モールを上方側に引張りながら前記凹溝内から強制的に引き出すようにしているため、前記モールの係合部に係合された前記係止クリップの各係止爪に引張応力が集中して、これら係止爪が破損して係止クリップから取外れ易いのであり、また、この係止クリップから係止爪が一旦取外れると、前記凹溝内にモールを再度取付けるとき、該モールの係合保持が不能となることから、前記係止クリップの再使用はできないのであり、従って、修理工場などにおいては交換用の係止クリップを用意しているのが通常である。

【0004】しかして、前記交換用係止クリップAは、図5で示すように、概略矩形状とされたクリップ本体Aの上面側で幅方向一側に、前後方向に延び、かつ、上方に向けて突出する突部A2を一体に設け、該突部A2の長さ方向2か所に開口孔A3、A3を形成して、これら各開口孔A3の内部に第1係止爪A4、A4をそれぞ

れ弹性変形可能に設けると共に、前記クリップ本体A1の上面他方側には、前記各第1係止爪A4と対向状に上方に向けて突出する弹性変形可能な2つの第2係止爪A5、A5を形成する一方、前記クリップ本体A1の下面側で前後左右4隅部には、自動車ルーフBに設ける凹溝B1の底面B2に当接され、該底面B2に対する前記係止クリップAの取付高さを設定する4つの高さ設定体A6をそれぞれ突出形成している。これら各設定体A6を設ける必要性は、次のような理由によるものである。つまり、前記ルーフドリップモールを前記凹溝B1から取り外した後、この凹溝B1内に前記モールを再度取付けるときには、前記凹溝B1の底面B2上で最初の係止クリップが両面接着テープを介して固着されていたほぼ同一箇所に流動性のある通常の接着剤Cを塗布し、該接着剤Cの硬化により前記クリップAを凹溝B1内に固着し、このクリップAに設けた前記各係止爪A4、A5に前記モールの係合部を係合させることにより、該モールの再取付けを行うのであるが、修理点検時などに、最初に前記モールを前記凹溝B1から外方へと引き出すとき、前記クリップAを前記凹溝B1の底面B2に固着する前記スponジ状の両面接着テープが前記モールの引張力により厚さ方向中間部位から剥離して、前記テープの一部が前記凹溝底面B2側に不均一な高さとなって残るのであり、従って、前記凹溝B1内へのモールの再取付時に、テープ一部が残存された前記凹溝底面B2上に前記接着剤Cを塗布して前記クリップAの下面側を固着すると、このクリップAの前記凹溝底面B2に対する取付高さや取付姿勢が不均一となり、また、以上の各係止クリップAで前記及びb1内に固定保持される前記モールの取付高さや取付姿勢も不均一となる。

【0005】ところが、以上のように、前記係止クリップAの下面側に前記各設定体A6を設ける場合、該各設定体A6を前記凹溝B1の底面B2上に当接させることにより、前記各設定体A6を介して前記クリップAの凹溝底面B2に対する取付高さを一定にできるのであり、従って、前記両面接着テープの剥がれ跡が残る前記凹溝B1の底面B2上で前記クリップAの取付部位に前記接着剤Cを盛り上げ状に塗布して、前記各設定体A6で前記クリップAを所定高さに保持しながら、該クリップAの下面側を前記接着剤Cに接合一体化されることにより、前記凹溝B1の所定高さ位置に所定姿勢で前記係止クリップAを固着することができ、また、斯かる各係止クリップAを介して前記凹溝B1内に前記モールを取付高さや取付姿勢を均一としながら取付けることができる。

【0006】

【発明が解決しようとする課題】しかしながら、以上の交換用係止クリップAでは、前記クリップ本体A1の下面側で前後左右4隅部に、自動車ルーフBに設ける凹溝B1の底面B2に当接され、該底面B2に対する前記ク

リップAの取付高さを設定する4つの高さ設定体A6がそれぞれ突設しているため、これら各設定体A6間に隙間が形成されるのであり、しかも、前記クリップAが取付けられる前記ルーフBは、一般に中央部が高く車体前後部が低くなるように傾斜していることから、特に、このルーフBの傾斜角度が大となる車体前後部位に位置される前記凹溝B1内に前記クリップAを取付け、該クリップAにより前記ルーフドリップモールの長さ方向両端側を固定保持するときで、前記凹溝B1の底面B2上で前記クリップAの取付部位に流動性のある通常の接着剤Cを盛り上げ状に塗布し、この接着剤Cの硬化により前記クリップAを固着する場合、前記接着剤Cの一部が前記クリップAの対向下面側から前記各設定体A6により形成される前後隙間を経て外方側へと流出し、前記クリップAの対向下面側に残る接着剤量が規定量以下となって、該クリップAの前記凹溝B1に対する取付強度が弱くなり、しかも、前記各設定体A6の隙間から前記接着剤Cが外方側に流出することにより前記ルーフBの外観を損なう不具合がある。

【0007】本発明の目的は、修理点検時などにルーフドリップモールを自動車ルーフの凹溝から外方に取出した後、該凹溝内に前記モールを交換用係止クリップを用いて再度取付ける時、たとえ前記凹溝の底面側に両面接着テープの一部が不均一な高さとなって残っていても、前記モールの取付高さや取付姿勢を均一に取付けることができながら、前記係止クリップを前記凹溝内に固着する接着剤がクリップ外方に流出するのを阻止でき、該接着剤により前記係止クリップを前記凹溝内に確実に固着することができ、しかも、前記接着剤の流出により前記ルーフの外観を損なったりすることなく、該ルーフの外観を良好に保持できるようにすることにある。

【0008】

【課題を解決するための手段】上記目的を達成するため、本発明は、ルーフ1に形成した凹溝11の底面に接着剤4により固着してルーフドリップモール2を係止する係止クリップにおいて、クリップ本体31に、該クリップ本体31下面の前記凹溝11下面に対する高さを設定する設定体36を設けると共に、前記クリップ本体31に、前記接着剤4が前記クリップ本体31の外方に流出するのを阻止する阻止壁37を設けたのである。

【0009】

【作用】以上の係止クリップによれば、修理点検時などに前記ルーフドリップモール2を自動車ルーフ1の凹溝11から外方に取出した後に、該凹溝11内に前記モール2を再度取付ける場合で、前記凹溝11の底面上で前記クリップ本体31の取付部位に流動性のある通常の接着剤4を盛り上げ状に塗布し、この接着剤4の硬化により前記クリップ本体31を固着するとき、たとえ前記凹溝11の底面上に両面接着テープの一部が不均一な高さとなって残っていても、前記クリップ本体31の下面側

に設けられた前記高さ設定体36を前記凹溝11の底面上に当接させることにより、前記設定体36を介して前記クリップ本体31を凹溝底面に対する取付高さ及び取付姿勢を一定として固着することができ、また、斯かる各係止クリップを介して前記モール2の取付高さや取付姿勢を均一に取付けることができながら、前記クリップ本体31における前記ルーフ1の傾斜方向下部側端部に設けた阻止壁37により、前記接着剤4の未硬化状態時に前記クリップ本体31から外方傾斜下部側へと流出するのを防止することができ、従って、このクリップ本体31と前記凹溝11の底面との間に所定量の接着剤4を確保できて、この接着剤4により前記クリップ本体31を前記凹溝11内に確実に固着することができ、しかも、前記阻止壁37で前記接着剤4の流出が阻止されることにより、この接着剤流出による前記ルーフ1の外観を損なったりすることなく、該ルーフ1の外観を良好に保持することができ、その上、前記阻止壁37を設けることにより、前記クリップ本体31の全体的な強度も強化することができるのである。

【0010】

【実施例】図4は自動車ルーフを部分的に示しており、このルーフ1の車幅方向両側には車体前後方向に延びる左右一対の凹溝11を形成して、これら各凹溝11の底面12上にはそれぞれルーフドリップモール2を取付けている。尚、前記ルーフ1は、図3で明らかなように、車幅方向に分割された複数の分割部材1A, 1Bから成り、これら各分割部材1A, 1Bの車幅方向両端部分を段状に折り曲げて、この折り曲げ部分を溶接手段で接合一体化することにより前記凹溝11を形成している。そして、自動車の修理点検時などに前記凹溝11から前記モール2を外方側へと一旦取出して、該モール2を前記凹溝11内に再度取付ける際に、最初に前記凹溝11内に前記モール3を固定保持していた係止クリップが破損した場合には、別の交換用係止クリップ3を用いるのである。

【0011】前記係止クリップ3は、図1～図3で示したように、概略矩形状とされたクリップ本体31の上面側で幅方向一側に、前後方向に延び、かつ、上方に向けて突出する突部32を一体に設け、該突部32の長さ方向2か所に開口孔33, 33を形成して、これら各開口孔33の内部には、該各開口孔33の上端縁に結合され、下端側が前記クリップ本体31の内下方に向けて傾斜状に突出された弾性変形可能な第1係止爪34, 34をそれぞれ設けると共に、前記クリップ本体31の上面他方側で前記各第1係止爪34との対向部位には、上端に前記クリップ本体31の内方側に向けて突出する係止部を備えた弾性変形可能な2つの第2係止爪35, 35を形成している。

【0012】そして、前記クリップ本体31の下面側で前後左右4隅部には、前記凹溝11の底面12上に当接

され、該底面12に対する前記係止クリップ3の取付高さを設定する4つの高さ設定体36をそれぞれ突出形成すると共に、前記クリップ本体31の少なくとも長さ方向一側部で前記ルーフ1の傾斜方向下部側端部には、前記クリップ3を前記凹溝11の底面12上に固着させるとき、この底面12上に塗布する接着剤4の前記クリップ本体21との対向部位からの流出を阻止する阻止壁37を、前記ルーフ1の傾斜方向下部側に位置される各設定体36、36間に跨って一体に設けるのである。尚、各図の実施例においては、前記ルーフ1の傾斜角度が大となるフロント側端部に設ける係止クリップ3を示しており、この係止クリップ3の場合には、前記ルーフ1の前部側が傾斜下部側となって低位となるため、前記クリップ本体31の下面前部側に前記阻止壁37を形成している。

【0013】また、前記ルーフドリップモール2は、図2で明らかなように、前記係止クリップ3に固定保持されるモール本体21と、該モール本体21の両側壁部に設けられた前記第1、第2係止爪34、35に係合する第1、第2係合部22、23と、前記クリップ3を介して前記モール本体21を凹溝11内に保持したとき、該凹溝11の両側端縁部に当接される2つの舌片24、25とを備えて構成している。

【0014】次に、以上の係止クリップ3の作用について説明する。先ず、修理点検時などに前記ルーフドリップモール2を自動車ルーフ1の凹溝11から外方に取出した後に該凹溝11内に前記モール2を再度取付ける際、最初に前記凹溝11内に固定保持していた係止クリップが破損した場合には、前記凹溝11の底面12上で最初の係止クリップが両面接着テープを介して固着されていたほぼ同一個所に流動性のある通常の接着剤4を盛り上げ状に塗布し、この接着剤4の硬化により前記係止クリップ3を前記底面12上に固着するのであるが、このとき、前記係止クリップ3を前記ルーフ1の傾斜角度大となるフロント側端部に取付ける場合でも、前記クリップ本体31の少なくとも長さ方向一側部で前記ルーフ1の傾斜方向下部側端部には、前記阻止壁37が設けられているため、該阻止壁37を介して前記接着剤4が未硬化状態時に前記クリップ本体31から外方下部側へと流出するのを防止することができ、従って、該クリップ本体31と前記凹溝11の底面12との間に所定量の接着剤4を確保できて、この接着剤4により前記クリップ本体31を前記凹溝11内に確実に固着することができ、しかも、前記阻止壁37で前記接着剤4の流出が阻止されることにより、この接着剤流出による前記ルーフ1の外観を損なったりすることなく、該ルーフ1の外観を良好に保持することができ、その上、前記阻止壁37を設けることにより前記クリップ本体31の全体的な強度も強化することができる。

【0015】さらに、以上のような前記モール2の前記

凹溝11内への再取付時に、たとえ該凹溝11の底面12上に両面接着テープの一部が不均一な高さとなって残っていても、前記クリップ本体31の下面側には複数の高さ設定体36が設けられているため、該各設定体36を前記凹溝11の底面上に当接させることにより、前記各設定体36を介して前記クリップ本体31の凹溝底面12に対する取付高さ及び取付姿勢を一定にできるのであり、従って、前記両面接着テープの剥がれ跡が残る前記凹溝11の底面12上で前記クリップ3の取付部位に前記接着剤4を盛り上げ状に塗布して、前記各設定体36で前記クリップ3を所定高さに保持しながら、該クリップ3の下面側を前記接着剤4に接合一体化させることにより、前記凹溝11の内方所定高さ位置に所定姿勢を保持させながら前記クリップ3を固着することができるのである。

【0016】そして、以上のように、前記ルーフ1の凹溝11内に前記係止クリップ3を固着した後には、該クリップ3に設けた前記各係止爪34、35に前記モール2に係止した各係合部22、23をそれぞれ係合させることにより、前記凹溝11に対し前記モール2の再取付けを行うのである。このとき、前記クリップ3は、前記各設定体36を介して前記凹溝11内の所定高さ位置に所定姿勢を保持した状態で固着されているため、斯かる各係止クリップ3を介して前記モール2の前記凹溝11に対する取付高さや取付姿勢を均一にして取付けることができる。

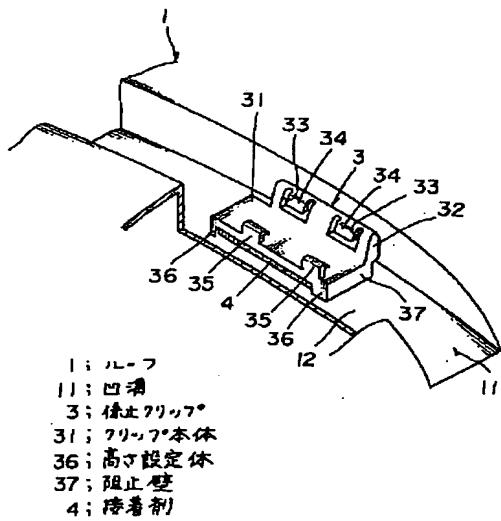
【0017】以上の実施例では、前記クリップ本体31の下面側で長さ方向一側部だけに前記阻止壁37を形成したが、この阻止壁37は前記クリップ本体31の下面長さ方向両側に設けることも可能であり、斯くするときには、前記各阻止壁37により前記接着剤4の外方側への流出を一層良好に阻止できるばかりか、前記クリップ本体31の剛性をさらに高めることができる。

【0018】

【発明の効果】以上説明したように、本発明の係止クリップによれば、クリップ本体31に、該クリップ本体31下面のルーフ凹溝11下面に対する高さを設定する設定体36を設けると共に、前記クリップ本体31に、前記凹溝11に付着する接着剤4の前記クリップ本体31からの流出を阻止する阻止壁37を設けたから、修理点検時などにルーフドリップモール2を自動車ルーフ1の凹溝11から外方に取出した後、該凹溝11内に前記モール2を再度取付ける場合で、前記凹溝11の底面上で前記クリップ本体31の取付部位に流動性のある通常の接着剤4を盛り上げ状に塗布し、この接着剤4の硬化により前記クリップ本体31を固着するとき、たとえ前記凹溝11の底面上に両面接着テープの一部が不均一な高さとなって残っていても、前記クリップ本体31の下面側に設けられた前記高さ設定体36を前記凹溝11の底面上に当接させることにより、前記設定体36を介して

前記クリップ本体31を凹溝底面に対する取付高さ及び取付姿勢を一定として固着することができ、また、斯かる各係止クリップを介して前記モール2の取付高さや取付姿勢を均一に取付けることが出来ながら、前記クリップ本体31における前記ルーフ1の傾斜方向下部側端部に設けた阻止壁37により、前記接着剤4の未硬化状態時に前記クリップ本体31から外方傾斜下部側へと流出するのを防止することができ、従って、このクリップ本体31と前記凹溝11の底面との間に所定量の接着剤4を確保でき、この接着剤4により前記クリップ本体31を前記凹溝11内に確実に固着することができ、しかも、前記阻止壁37で前記接着剤4の流出が阻止されることにより、この接着剤流出による前記ルーフ1の外観を損なったりすることなく、該ルーフ1の外観を良好に保持することができ、その上、前記阻止壁37を設けることにより、前記クリップ本体31の全体的な強度も強化することができる。*

【図1】



* 【図面の簡単な説明】

【図1】本発明にかかる係止クリップの凹溝への取付状態を示す一部切欠斜視図。

【図2】同係止クリップの下面側から見た拡大斜視図。

【図3】凹溝に取付けられた係止クリップの縦断面図。

【図4】自動車ルーフの部分的な斜視図。

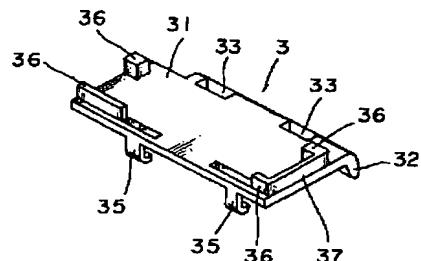
【図5】従来の係止クリップを示す斜視図。

【符号の説明】

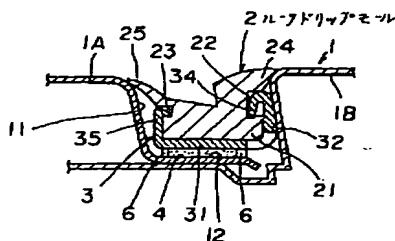
- | | |
|----|------------|
| 1 | ルーフ |
| 11 | 凹溝 |
| 2 | ルーフドリップモール |
| 3 | 係止クリップ |
| 31 | クリップ本体 |
| 36 | 高さ設定対 |
| 35 | 阻止壁 |
| 4 | 接着剤 |

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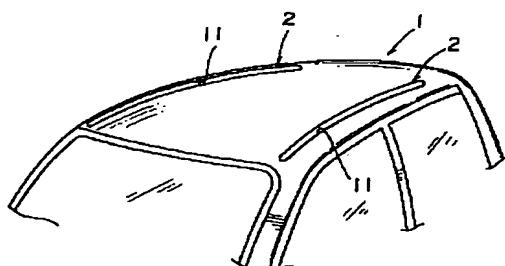
【図2】



【図3】



【図4】



【図5】

